IN THE CLAIMS:

1. (previously presented) A method for selecting an animal for having desired genotypic properties comprising testing said animal for the presence of a parentally imprinted quantitative trait locus (QTL).

2. (previously presented) The method according to claim 1, further comprising testing a nucleic acid sample from said animal for the presence of a QTL.

3. (currently amended) The method according to claim 1, wherein said animal ~~comprises~~ is a pig and in said pig said QTL is located at chromosome 2.

4. (currently amended) The method according to claim 1, wherein said animal ~~comprises~~is a pig and in said pig said QTL maps at about position 2p1.7.

5. (previously presented) The method according to claim 1 wherein said QTL is related to the potential muscle mass and/or fat deposition of said animal.

6. (previously presented) The method according to claim 5 wherein said QTL comprises at least a part of an insulin-like growth factor-2 gene.

7. (currently amended) The method according to claim 1, wherein said animal ~~comprises~~ is a pig and in said pig said QTL comprises a marker characterized as nt241(G-A) or as Swc9.

8. (previously presented) The method according to claim 1 wherein a paternal allele of said QTL is predominantly expressed in said animal.

9. (previously presented) The method according to claim 1 wherein a maternal allele of said QTL is predominantly expressed in said animal.

10. (withdrawn) An isolated and/or recombinant nucleic acid comprising a parentally imprinted quantitative trait locus (QTL) or a functional fragment of said QTL comprising genetic information capable of influencing a quantitative trait of an animal.

11. (withdrawn) An isolated and/or recombinant nucleic acid comprising a synthetic parentally imprinted quantitative trait locus (QTL) derived from at least one chromosome or a functional fragment of said chromosome comprising genetic information capable of influencing a quantitative trait of an animal.

12. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 10 at least partly derived from a Sus scrofa chromosome.

13. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 12 wherein said nucleic acid is at least partly derived from a Sus scrofa chromosome 2.

14. (withdrawn) The nucleic acid according to claim 10 wherein said QTL is related to the potential muscle mass and/or fat deposition of said animal.

15. (withdrawn) The nucleic acid according to claim 10 wherein said QTL comprises at least a part of an insulin-like growth factor-2 gene.

16. (withdrawn) The nucleic acid according to claim 10 wherein a paternal allele of said QTL is capable of being predominantly expressed.

17. (withdrawn) The nucleic acid according to claim 10 wherein a maternal allele of said QTL is capable of being predominantly expressed.

18-23. (Canceled)

24. (withdrawn) A transgenic animal comprising the isolated and/or recombinant nucleic acid according to claim 11.

25. (withdrawn) The transgenic animal according to claim 24 wherein said transgenic animal is a male.

26. (withdrawn) Sperm or an embryo derived from the transgenic animal according to claim 24.

27. (withdrawn) A method for breeding animals destined for slaughter comprising utilizing the sperm or embryo according to claim 26.

28. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 13 wherein said isolated and/or recombinant nucleic acid is at least partly derived from a region mapping at about position 2p1.7.

29. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 11 at least partly derived from a Sus scrofa chromosome.

30. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 29 wherein said isolated and/or recombinant nucleic acid is at least partly derived from a Sus scrofa chromosome 2.

31. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 30 wherein said isolated and/or recombinant nucleic acid is at least partly derived from a region mapping at about position 2p1.7.

32. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 11 wherein said QTL is related to the potential muscle mass and/or fat deposition of said animal.

33. (withdrawn) The isolated and/or recombinant nucleic acid according to claim 11 wherein said QTL comprises at least a part of an inuslin-like growth factor-2 gene.

34. (withdrawn) The nucleic acid according to claim 11 wherein a paternal allele of said QTL is capable of being predominantly expressed.

35. (withdrawn) The nucleic acid according to claim 11 wherein a maternal allele of said QTL is capable of being predominantly expressed.

36. (previously presented) The method according to claim 1 wherein said testing comprises utilizing an isolated and/or recombinant nucleic acid comprising a QTL or a functional fragment of said QTL comprising genetic information capable of influencing a quantitative trait of said animal.

37. (currently amended) The method according to claim 36 wherein said animal ~~comprises~~ is a breeding animal or an animal destined for slaughter and wherein said desired genotypic properties further comprise potential phenotypic properties.

38. (previously presented) The method according to claim 37 wherein said desired genotypic properties are related to muscle mass and/or fat deposition.

39. (new) A method of selecting an animal having a desired trait, said method comprising:

associating a phenotypic trait with a parentally imprinted quantitative trait locus;

mapping the parentally imprinted quantitative trait locus to a locus in a genome in the species of the animal;

obtaining a nucleic acid sample from the animal; and

determining whether the parentally imprinted quantitative trait locus is present in the nucleic acid sample from the animal;

wherein the parentally imprinted quantitative trait locus is present in the nucleic acid sample, thus selecting the animal.

40. (new) The method according to claim 39, further comprising:

linking a genetic marker to the parentally imprinted quantitative trait locus;

wherein determining whether the parentally imprinted quantitative trait locus is present in the nucleic acid sample from the animal comprises testing the nucleic acid sample for the genetic marker's presence.